

Transformation Lab Menu

1. Label one closed centrifuge tube +pGLO and another -pGLO. Label both tubes with your group's name. Place them in the foam tube rack.
2. Open the tubes. transfer 200 μ l of transformation solution (CaCl₂) into each tube.
3. Place the tubes on crushed ice.
4. Use a streaker to pick up a large single colony of bacteria from your starter plate.
5. Pick up the +pGLO tube and immerse the colony into the transformation solution at the bottom of the tube. Spin the streaker between your index finger and thumb until the entire colony is dispersed in the transformation solution (with no floating chunks). Place the tube back in the tube rack in the ice. Using a new streaker, repeat for the -pGLO tube.
6. Add 2 μ l of pGLO plasmid to the +pGLO tube.
7. Incubate the tubes on ice (0°C) for 10 min. Make sure to push the tubes all the way down in the rack so the bottom of the tubes stick out and make contact with the ice.
8. While the tubes are sitting on ice, label your four agar plates on the bottom (not the lid) as shown in the diagram.
9. Heat shock: Transfer both the (+) pGLO and (-) pGLO tubes into the water bath (42°C) , for exactly 50 seconds. Place both tubes back on ice (0°C) after 50 seconds rapidly. Incubate tubes on ice (0°C) for 2 min./
10. Add 200 μ l of LB nutrient broth to both tubes.
11. Incubate the tubes for 10 mins at room temperature.
12. Gently mix the tubes. Transfer 100 μ l from each of the tubes to the corresponding plates, as shown on the diagram onto the appropriate plates.
13. Spread the cell evenly on each plate.
14. Stack up your plates and tape them together. Place the stack upside down in the 37°C incubator until the next day.

